Statement of the Case.

jurisdiction of the United States. But whether that be so or not, (which we are not required in this case to decide,) it affords no sufficient reason for refusing to give full effect, according to what appears to us to be their manifest meaning, to the positive words of the first section, which enact, as to "any vessel" transporting merchandise or property "between ports of the United States and foreign ports," that all stipulations relieving the carrier from liability for loss or damage arising from negligence in the loading or stowage of the cargo shall not only be unlawful, but "shall be null and void and of no effect."

This express provision of the act of Congress overrides and nullifies the stipulations of the bill of lading that the carrier shall be exempt from liability for such negligence, and that the contract shall be governed by the law of the ship's flag.

Decree affirmed.

HUBBELL v. UNITED STATES.

APPEAL FROM THE COURT OF CLAIMS.

No 19. Argued January 9, 10, 1899.—Decided October 22, 1900.

An examination of the history of the appellant's claim shows that in order to get his patent he was compelled to accept one with a narrower claim than that contained in his original application; and it is well settled that the claim as allowed must be read and interpreted with reference to the rejected claim and to the prior state of the art, and cannot be so construed as to cover either what was rejected by the Patent Office, or disclosed by prior devices.

This court concurs with the court below in holding that the cartridges made and used by the United States were not within the description contained in the appellant's claim.

On December 28, 1878, William Wheeler Hubbell filed, in the United States Patent Office, an application for a patent for an improvement in metallic cartridges, and on February 18, 1879, letters patent No. 212,313 were granted and issued to him.

Counsel for Parties.

On April 19, 1883, Hubbell, the patentee, filed a petition in the Court of Claims against the United States, alleging that the latter were using his patented methods in circumstances that warranted a claim for compensation. This case was numbered in the Court of Claims as No. 13,793, and was so proceeded in that on June 1, 1885, judgment was entered in the Court of Claims dismissing the petition. 20 C. Cl. 354. In August, 1885, an application for allowance of an appeal from that judgment to this court was filed. Pending this application Hubbell brought another suit against the United States in the Court of Claims by filing a petition, No. 16,261, on June 11, 1888, presenting substantially similar issues to those asserted in the first suit.

On December 23, 1895, judgment was entered by the Court of Claims dismissing the petition in the second case. 31 C. Cl. 464. On March 20, 1896, an application for allowance of an appeal from this judgment to this court was filed, and on July 6, 1896, this appeal was allowed. On May 31, 1898, the judgment of the Court of Claims, dismissing the petition in the second case, was approved by this court. 171 U. S. 203.

On June 7, 1898, the application for allowance of appeal in the first case was allowed, and on May 31, 1898, a petition was allowed to be filed in this court for a rehearing in the second case. The appeal in the first case and the petition for a rehearing in the second case were argued together in this court on January 9, 10, 1900.

Mr. Frederic D. McKenney and Mr. George S. Boutwell for appellant. Mr. F. P. Dewees and Mr. J. Nota McGile were on their briefs.

Mr. Charles C. Binney for appellee. Mr. Assistant Attorney General Pradt was on his brief.

Mr. Justice Shiras, after stating the case, delivered the opinion of the court.

It is contended, on behalf of the appellant, that we should

regard the present case and the case disposed of upon the former appeal, in 171 U. S. 203, as constituting substantially one controversy, and that we should give the appellant the benefit of the new or additional facts which, it is claimed, were made to appear by the amended findings in the first case. It is claimed, on the part of the United States, that the former decision of this court was a final adjudication of the controversy, that its finality was not affected by the subsequent allowance by the trial court of an appeal from the former judgment, and that, at all events, the additional findings were, in substance, not different from those previously made, and, even if now considered, show no sufficient grounds for reversing the judgment of the Court of Claims in the present case, or that of this court on the first appeal.

Whether if the additional findings of the trial court had presented a new and meritorious case, this would afford a sufficient reason for this court to set aside its previous judgment, and to enter upon a consideration of the controversy *de novo*, we do not decide, as, even upon such an assumption, we agree with the court below in thinking that the new findings did not make a new or different case, or impair the legal foundation of the judgment rendered in the case in which they were made.

Those findings, as we find them printed in the record of the case, No. 198 of the October term, 1897, of this court, consist partly of matters connected with the claim on account of the manufacture and use of the cup-anvil cartridge, and as the claimant filed a waiver of that claim such parts of the findings have no relevancy now. Other portions of the additional findings bear on the number of cartridges made by the United States, so as to afford a basis for estimating the damages, if the claimant should recover, and do not affect the legal questions involved. Other of the findings allowed reference to certain drawings filed by the claimant in previous applications made by him in the Patent Office, which may have some relevancy as disclosing the history of the art, but do not appear to materially affect the construction of the claim finally allowed by the Patent Office, and the same may be said of some verbal amendments allowed to the findings previously made.

An examination of the history of the appellant's claim, as disclosed in the file wrapper and contents, shows that in order to get his patent he was compelled to accept one with a narrower claim than that contained in his original application; and it is well settled that the claim as allowed must be read and interpreted with reference to the rejected claim and to the prior state of the art, and cannot be so construed as to cover either what was rejected by the Patent Office or disclosed by prior devices. Leggett v. Avery, 101 U. S. 256; Shepard v. Carrigan, 116 U. S. 593; Knapp v. Morss, 150 U. S. 221, 227.

It is quite true that, where the differences between the claim as made and as allowed consist of mere changes of expression, having substantially the same meaning, such changes, made to meet the views of the examiners, ought not to be permitted to defeat a meritorious claimant. While not allowed to revive a rejected claim, by a broad construction of the claim allowed, yet the patentee is entitled to a fair construction of the terms of his claim as actually granted. The specification, as amended, contained the following description:

"The distinguishing feature of my invention is the organized. construction to carry into complete effect the expressed principles of operation of the fulminate of mercury or detonating powder and the powder charge. In this organization the fulminate, although the superior explosive force, is contracted into a diminished or small central chamber, and fills it. The flange and head of the metallic case are solid, all in one piece. chamber at its sides or outer extreme edges communicates directly and exclusively with the powder charge, so that the explosive force of the fulminate is not allowed to expand under a larger area of the anvil plate and blow it out, but is compelled to diffuse its explosive force, not in a central stream, but in a diffused body into the base of the powder charge. To effect this, the central anvil piece has no central aperture, is as wide as the fulminate-filled chamber, and the perforations are at the extreme outer sides of this fulminate, for two purposes: one is to diffuse the fire from this center most thoroughly; the other is to have an unperforated anvil over and against the fulminate, as it rests solid in its chamber, to receive the central blow of a

striker and obtain complete resistance by the anvil bar, and yet have free escapement for the explosive force at once from beneath the anvil plate without any chamber or space for it to expand into under the plate. This assures a certain ignition, security of the anvil plate to keep its position, and a complete combustion of the powder charge, from the base forward, as it impels the bullet out of the gun."

The claims made in the application were as follows:

"1st. The circular plate E, constructed with central solid resisting piece i, and two or more side perforations k k, substantially as described, applied within a metal case, with cylinder and rear end solid and tight, thereby requiring the insertion of the plate and charge and priming from the front, igniting the charge and remaining firetight in firing as described.

"2d. The circular plate E, constructed as described, in combination with the circular disc D, and metal solid firetight case A, substantially as shown and described.

"3d. A circular metallic tight-fitting plate, perforated into a central fulminate chamber, leaving a central solid or unperforated bar over the fulminate chamber, within a solid firetight metal case, substantially as set forth."

The examiners rejected these claims on reference to prior patents. Thereupon the claimant, having amended his specification as above, substituted for the three claims above copied the following:

"What I claim as new and desire to secure by letters patent is —

"The construction and arrangement of the chamber of fulminate, anvil, plate, perforations and case, with the central constructed filled chamber of fulminate powder in contact and between the base of the case and the circular anvil plate, with central anvil bar and two or more side perforations, extending from the extreme sides of the chamber of fulminate into the base of the powder charge, whereby the smallest area of resistance is presented to the fulminate explosion, and the fire is diffused in the base of the charge of powder, and the greatest resistance is presented by the front face of the plate to the powder

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charge, consuming the powder and securing the plate as and by the means described."

The examiners held that the construction described in the amended specification involved patentable novelty, and that a specific and well defined claim might be allowed, but not the amended claim, it being "vague, indefinite and ambiguous." The claimant thereupon withdrew the above amended claim, and substituted another, which was finally allowed, in the following terms:

"What I claim as new and desire to secure by letters patent is —

"In the bottom of a solid metallic flange cartridge case or shell the combination of a circular base inclosing a central chamber of fulminate provided with two or more openings, whose inner edges nearly coincide with the edges of the central chamber of fulminate in the base of the cartridge, substantially as described."

It is obvious that this is a claim for a combination, none of the elements or constituent parts of which are claimed to be new, but whose merit consists in such an adjustment and relation of the parts as to produce the desired effect.

"In such a claim, if the patentee specifies any element as entering into the combination, either directly by the language of the claim, or by such reference to the descriptive part of the specification as carries such element into the claim, he makes such element material to the combination, and the court cannot declare it to be immaterial. It is his to make his own claim and his privilege to restrict it. If it be a claim to a combination, and be restricted to specified elements, all must be regarded as material, leaving open only the question whether an omitted part is supplied by an equivalent device or instrumentality." Fay v. Cordesman, 109 U. S. 408.

"In patents for combinations of mechanism, limitations and provisoes, imposed by the inventor, especially such as were introduced into an application after it had been persistently rejected, must be strictly construed against the inventor and in favor of the public, and looked upon in the nature of disclaimers." Sargeant v. Hall Safe & Lock Co., 114 U. S. 63.

"If an applicant, in order to get his patent, accepts one with a narrower claim than that contained in his original application, he is bound by it. If dissatisfied with the decision rejecting his application, he should pursue his remedy by appeal." Shepard v. Carrigan, 116 U. S. 593.

When the rejected claims and the one finally allowed are compared, it will be perceived that they all describe the combination as consisting of a circular base, containing a central chamber of fulminate, the anvil over it, with two or more perforations to permit the fire or explosive force of the fulminate to be communicated to the powder charge. What, then, was the difference or modification which resulted in the allowance of a claim? We agree with the court below in finding that difference in the position of the apertures or vents. The examiners refused to allow the claim until the claimant distinctly located the vents as "openings whose inner edges nearly coincide with the edges of the central chamber of fulminate in the base of the cartridge," thereby making the relative position of the vents and the walls of the fulminate chamber a material part of the claimant's patent. Breach-loading metallic cartridges were not new, and it was the opinion of the examiners that, in merely claiming "a circular metallic tight-fitting plate perforated with a central fulminate chamber, leaving a central solid or unperforated bar over the fulminate chamber, within a solid firetight metal case," the claimant was anticipated by the patents of Moffat, 53,168, March 13, 1866; of Tibbals, 90,607, May 25, 1869, and by an English patent, 2906, 1865. It was not until the claimant specifically claimed, as part of his combination, "an anvil over the fulminate provided with two or more openings whose inner edges nearly coincide with the edges of the central chamber of fulminate in the base of the cartridge," that the patent was allowed. Whether the examiners were right or wrong in so holding we are not to inquire, as the claimant did not appeal, but amended his claim and accepted a grant thereof; thereby putting himself within the range of the authorities which hold that if the claim to a combination be restricted to specified elements, all must be regarded as material, and that limitations imposed by the inventor, es-

pecially such as were introduced into an application after it had been persistently rejected, must be strictly construed against the inventor and in favor of the public, and looked upon as in the nature of disclaimers.

"It may be observed that the courts of this country cannot always indulge the same latitude which is exercised by English judges in determining what parts of a machine are or are not material. Our law requires the patentee to specify particularly what he claims to be new, and if he claims a combination of certain elements or parts, he cannot declare that any one of these elements is immaterial. The patentee makes them all material by the restricted form of his claim." Per Mr. Justice Bradley in Water Meter Company v. Desper, 101 U. S. 332, 337; Morgan Envelope Co. v. Albany Paper Co., 152 U. S. 425, 429.

With these principles of construction in view, we are constrained to concur with the court below in holding that the cartridges made and used by the Government were not within the description contained in the appellant's claim.

The Government cartridges alleged to be within the appellant's patent are of two kinds, one called the "cup-anvil cartridge," the other the "reloading cartridge." As the appellant has withdrawn his claim for infringment of the former, we have only to do with the latter or reloading cartridge. It is thus described in the sixth finding of the court below:

"This cartridge is a hollow metallic shell, rimmed around the base, with a pocket in the exterior of the center of the base; through the center of the top of this pocket, supposing the cartridge to be stood upon its base or closed end, is pierced a single aperture or hole to carry the fulminate flame to the black powder chamber. This cartridge contains only the black powder and the bullet. Any one of the several kinds of primers may be used in it. The one used by the United States and alleged to infringe claimant's rights is a circular metallic cup, into which is put the fulminate; above this is fastened a disk or cover having a groove on its upper side, being the diameter of the circle; at each end of this grove a small piece or notch is cut out of it; through the holes thus formed the flame from the fulminate escapes; if this primer is placed in the chamber of the reloading

cartridge, with the closed end of the cup outwards and the grooved end against the top of the chamber, the flame from the fulminate when exploded would pass through these holes or notches, thence along the groove to the central aperture in the cartridge case or shell, thence to the black powder chamber through this single aperture. The entire area of each of the holes or notches in the disk is over the fulminate chamber, and the portion of the disk between the holes is the anvil."

This finding is claimed by the appellant to be incorrect in several respects, and particularly in its statement that "the portion of the disk between the holes is the anvil."

But even if we were permitted as an appellate court to depart from the findings of fact made by the trial court, we do not perceive that the particulars in which this finding is objected to really affect the case as presented to us. Even if we were to adopt the description of the Government's cartridge given by the appellant, it still appears that there is an essential difference between the two types of cartridge. Without accepting or rejecting the Government's contention that the Government's cartridge is outside primed and the appellant's inside primed, and wherein it is claimed that for reloading purposes an outside primed cartridge is superior, it is sufficient to say that the difference in the shape and position of the vents, whereby the explosive force of the fulminate is communicated to the powder charge, is obvious.

The distinguishing feature of the appellant's cartridge is that the anvil plate has two or more openings whose inner edges nearly coincide with the edges of the central chamber of fulminate; but in the reloading cartridge of the Government the vents are wholly over the fulminate chamber, do not lead directly to the powder chamber, but lead to a channel cut across the upper face of the anvil, and by this to a hole in the base of the powder chamber.

By this latter construction the explosive force of the fulminate enters the powder chamber in a central stream. But the appellant specifies, as a distinguishing feature, that the fulminate "chamber at its sides or outer extreme edges communicates directly and exclusively with the powder charge, so that the explosive force of the fulminate is not allowed to expand under a

larger area of the anvil plate and blow it out, but is compelled to diffuse its explosive force, not in a central stream, but in a diffused body into the base of the powder charge."

It may be, as the appellant contends, that his method of communicating the explosive force of the fulminate to the powder charge is an improvement on previous methods, and is superior in efficacy to that used in the Government's cartridges; but our inquiry is not as to the merits of the patent in suit, but is confined to the question whether it covers, in legal contemplation, the defendant's cartridge.

Some contention is made, in argument, that because it is stated that some grains of powder may and do fall down through the base of the defendant's powder chamber, and lie loosely in the groove across the upper face of the anvil, therefore it must be concluded that such loose grains of powder come directly in contact with the flame of the fulminate before the latter enters the powder chamber. But such a fact, if it be a fact, appears to be immaterial. It is not pretended that these few loose grains of powder are relied on, or in fact operate, as a means of igniting the charge in the powder chamber.

Nor can we accept the contention that these two combinations are identical because they are intended to obtain the same result. What we have to consider is not whether the end sought to be effected is the same, but whether the devices or mechanical means by which the desired result is secured are the same.

We do not consider it necessary to consider a further suggestion, contained in the opinion of the court below, that, even if the relative position of the vents and the wall of the fulminate chamber be not a material part of the claimant's patent, still the claimant cannot recover because the other characteristics of his invention, found in the cartridge now used by the defendants, were introduced by them prior to the application for or issue of the patent.

The decree of the Court of Claims, dismissing the claimant's petition, is

Affirmed.

No. 198.—October Term, 1897.. Hubbell v. United States. Appeal from the Court of Claims. The petition in the above-entitled case, for a rehearing, is denied.